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EXAMINER

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ART UNIT	PAPER NUMBER
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2145

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/845,737

Applicant(s)

MURREN ET AL.

Examiner

Jeffrey R. Swearingen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 12-16, 18-21, 23, 24 and 48-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-16, 18-21, 23, 24 and 48-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6 pages</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's argument regarding the rejection under 35 U.S.C. 112, first paragraph, is not persuasive. One of ordinary skill in the art would be unable to implement the invention based upon the specification provided by Applicant.
2. The specification provided by Applicant is not "abundantly clear" about the intended goal of the invention. Applicant has stated that the invention's purpose is "to provide a server architecture that can accommodate modification in an efficient and flexible manner." Applicant is invited to explain this terminology in a manner which one of ordinary skill in the art would be able to grasp the goal of the invention. As it stands, Applicant has stated an unclear purpose for the invention and one of ordinary skill in the art would not be able to ascertain what the invention accomplishes, which is necessary for implementation of the invention given the state of the specification.
3. Applicant speaks to the "source code that is developed specifically for each domain". Applicant has failed to define in the specification what a domain encompasses or to provide examples of a domain to assist one of ordinary skill in the art to implement the invention.
4. Applicant has further addressed the alleged "flexibility of the architecture". One of ordinary skill in the art could not implement the invention based solely upon the flexibility of the architecture. One of ordinary skill in the art would need to know how the architecture and its "flexibility" could be used to implement the invention within various "domains".
5. Applicant states that the specification is "abundantly clear" that an objective of the invention is to "provide a modular architecture that readily allows logic to be swapped in and out, thus expediting software development." Upon additional review of the specification, it stands that one of ordinary skill in the art would not fully grasp this objective based upon the specification provided by Applicant. Applicant has not described how the invention can be implemented. Applicant has submitted a large amount of

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technical and architectural information and neglected to explain the implementation of the technical and architectural information to one of ordinary skill in the art.

6. Applicant argues again that one of ordinary skill in the art would be able to implement the invention. It is clear that one of ordinary skill in the art would not be able to implement the invention. The allegation by Applicant that the invention can be utilized in an online manner to field user queries is not adequately supported or explained by the specification in sufficient detail to allow one of ordinary skill in the art to actually implement the invention.

7. Applicant argues that the invention is "defined by the claims". While Applicant's invention is "defined by the claims", it is not supported by the specification. **For example, the "interface layer" referred to within claim 1 is located nowhere within the specification.** This example alone supports Applicant's assertion that the invention is "defined by the claims" and the fact that the invention is not enabled by the specification under 35 U.S.C. 112, first paragraph.

8. Applicant's cited section of pages 19-33 of the specification does not show how the invention is enabled or implemented in various domains. The field of "asset management" – which is undefined by the specification – does not show one of ordinary skill in the art how the invention can be implemented.

9. For at least these reasons, the rejection under 35 U.S.C. 112, first paragraph is maintained.

10. Applicant has stated a vast amount of technical information within the specification, but has not explained how to use that technical information to implement the invention. This assertion is not based upon the personal opinion of the Examiner, but rather based upon the evidence, namely the specification, drawings and claims, presented by Applicant.

11. Applicant raises issues concerning the prosecution of co-pending patent applications and their individual treatment by various Examiners. The Examiner of record is unaware of any citation within the MPEP that states that the Examiner is bound by the work of another Examiner on a co-pending application. Further, the co-pending applications were not combined *en masse* and presented to any other Examiner in an omnibus format. This observation also has bearing on how the present application would be interpreted by one of ordinary skill in the pertinent art.

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12. The amendment of claim 16 has overcome the rejection under 35 U.S.C. 112, second paragraph on the basis of inadequate antecedence.

13. Applicant's argument regarding "locale-sensitive content" in claim 29 has overcome the rejection under 35 U.S.C. 112, second paragraph on the basis of inadequate antecedence.

14. The 42 terms presented as being indefinite under 35 U.S.C. 112, second paragraph are not adequately traversed by Applicant. Applicant is pointed to the cited portion of MPEP 2173.05(a): *If the claims, read in light of the specification, reasonably apprise those skilled in the art both of the utilization and scope of the invention, and if the language is as precise as the subject matter permits, the statute (35 U.S.C. 112, second paragraph) demands no more.* The terms within the claims, read in light of the specification, are indefinite to one of ordinary skill in the art.

15. The terms presented by Applicant are not inherently descriptive. Applicant presents the example of a *multi-layer application*. Since no definition is present for what would be considered a layer, it is thereby presented that a *multi-layer application* is indefinite in light of the specification. The textual portion of the specification consistently uses the term without clearly defining the term. The drawing portion of the specification does not illustrate the concept of a multi-layer application.

16. In regard to the *interfacing layer* recited by Applicant, no support, definition, or reference has been located for this term within the specification. This is another example of where the claims, read in light of the specification, do not reasonably apprise those skilled in the art both of the utilization and scope of the invention. The law demands that the claims, read in light of the specification, reasonably apprise those skilled in the art both of the utilization and scope of the invention. MPEP 2173.05(a).

17. These requirements to fulfill the indefinite clause of 35 U.S.C. 112 are not imposed by the Examiner, but by the law. Again, no "personal preference" has been applied by the Examiner in regard to the lack of definitions provided by Applicant.

18. Applicant has used multiple terms within the claims that are not defined within the specification. The lack of the appropriate definitions for these terms has made the claims indefinite.

19. The rejections under 35 U.S.C. 112, second paragraph (excepting the antecedent basis rejections withdrawn above) are maintained for at least these reasons.

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20. The objection to the drawings is maintained, since one of ordinary skill in the art cannot use the currently provided drawings to assist in implementation of the invention.

21. The requirement for a substitute specification is maintained. The previous statement regarding the comprehensibility of the specification is withdrawn. It is noted that the specification is incomprehensible to one of ordinary skill in the art. The rejection is maintained based upon what context can be ascertained from the currently submitted specification, drawings, and claims. The Examiner's personal preference has not played a factor in this determination.

22. In regard to the rejections made over the prior art, Applicant is pointed to MPEP 2111.01, herein cited. **During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification."** In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

23. The inetd daemon disclosed in Stevens has clearly disclosed a *multi-layer application executing on the computers to handle client requests submitted by various client devices, wherein the multi-layer application includes the claimed combination of a problem-solving logic layer, an execution environment layer, an interfacing layer, and a presentation layer, wherein any of the layers may be changed without impacting other layers*. Giving the terms in the claim their broadest reasonable interpretation, without considering that terms such as the *interfacing layer* are not found or supported within the specification, one of ordinary skill in the art would interpret the inet daemon to fulfill the metes and bounds of the claimed invention.

24. Stevens disclosed a framework for UNIX network protocols. These protocols were designed for use with TCP/IP and inherently would interface with the OSI model. Therefore the presentation layer of the OSI model would be integrated with the claimed invention.

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25. Applicant's amendment of *any of the layers may be changed without impacting other layers* was supported by Stevens, in that Stevens is a flexible programming structure designed for ease of use by one of ordinary skill in the art.

26. In regard to claim 48 and the arguments regarding *business-related problem domains*, Applicant is again directed to MPEP 2111.01, which recites that the broadest reasonable interpretation must be given to the claims. The cited portions of Stevens have disclosed the operations of *retrieving the data from one or more external resources and mapping the data to a domain framework for the business-related problem domain, the domain framework being independent from the problem-solving logic and interfacing the problem-solving logic to the domain framework to obtain the data for use in processing the request*.

27. In regard to claim 20, Stevens has disclosed a *hierarchy of constraints*, given the broadest reasonable interpretation of the claim language per MPEP 2111.01. Customization is taught throughout Stevens.

28. In regard to claim 10, Applicant states that "neither Stevens nor Gilly disclose an interfacing layer comprising a combination of a data abstraction layer and a data coordination layer as claimed." It is submitted that Applicant failed to disclose an interfacing layer within the specification. In light of this failure to disclose by Applicant, the broadest reasonable interpretation of the claim language is applied, per MPEP 2111.01.

29. In regard to claim 17, Applicant has traversed the Official Notice taken by the office regarding the presentation and rendering modules. Further excerpts of the Gilly reference are enclosed that clearly show that displaying data on a monitor was well known at the time of the invention. The presence of the presentation and rendering modules is inherent to displaying data upon a monitor. Rendering was used to create the proper pixel display for the monitor and presentation was used to format the data to send to the rendering module. This separation is necessary and common based upon hardware constraints.

30. Stevens has disclosed use of constraints in the form of parameters. Again, the broadest reasonable interpretation of the claim language is applied per MPEP 2111.01.

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31. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

32. In response to Applicant's arguments concerning the Peek reference, Peek disclosed the limitations claimed by Applicant. Applicant has addressed the additional functionality of the claims but has not addressed it with regard to the Peek reference.

33. The traversal of the double patenting rejection is explicitly recited below in the office action.

Claim Rejections - 35 USC § 102

34. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

35. Claims 1-9, 12-16, 18-21, 23-24, and 48-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Stevens (Unix Network Programming).

36. In regard to claim 1, Stevens discloses *one or more computers; and a multi-layer application executing on the computers to handle client requests submitted by various client devices, the multi-layer application comprising: a problem-solving logic layer to process the client requests according to an associated problem domain, wherein the problem domain pertains to a particular category of service, the problem-solving logic layer containing one or more execution models to perform various sets of tasks when processing the client requests, the problem-solving logic layer producing replies to the client requests; an execution environment layer to receive the client requests and select an appropriate*

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execution model in the problem-solving logic layer for processing the client requests; an interfacing layer to interface the problem-solving logic layer with one or more resources so that the execution models may utilize the resources when processing the client requests; and a presentation layer to receive the replies produced by the problem-solving logic layer and to structure the replies in a manner that makes the replies presentable on the various client devices, wherein any of the layers may be changed without impacting other layers. Stevens discloses the *inetd* process that services multiple connection requests. As each request is received by *inetd*, it executes the appropriate server program to handle the request. [Stevens, 334-341] This is the *problem-solving logic layer*, the *interfacing layer*, and the *execution environment layer*. Stevens also describes common use of a *presentation layer* for presenting replies on various devices, as part of the OSI model. [Stevens, 7] By this rationale claim 1 is rejected.

37. In regard to claim 2, Stevens is applied as in claim 1. Stevens further discloses *a framework to receive the client requests and route the requests to the problem-solving logic for processing.* Stevens describes such steps in step 6 of page 337. By this rationale claim 2 is rejected.

38. In regard to claim 3, Stevens is applied as in claim 2. Stevens further discloses *one or more adapters to interface the framework with different types of the client devices.* See Stevens, 335. Stevens also speaks to *different types of client devices* on page 2. By this rationale claim 3 is rejected.

39. In regard to claim 4, Stevens is applied as in claim 1. Stevens further discloses *a model dispatcher to route the client requests to selected execution models in the problem-solving logic layer; and a request dispatcher to structure the replies for return to the client devices.* Stevens has already disclosed how *inetd* receives requests and routes them to the appropriate server programs for execution [model dispatcher]. Stevens also discloses that the socket interface in use with *inetd* on a UNIX system also supports *structuring replies for return to the client device.* See Stevens, 261, Figure 6.2. By this rationale claim 4 is rejected.

40. In regard to claim 5, Stevens is applied as in claim 1. Stevens further discloses *the multi-layer application can be adapted to receive requests from new client devices with incompatible communication protocols by substituting a new execution environment layer that supports the new client devices.*

Stevens discloses the ability to support multiple communication protocols on pages 259 and 271. The

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use of inetd with this ability should provide the same functionality as Applicant's claimed subject matter.

By this rationale claim 5 is rejected.

41. In regard to claim 6, Stevens is applied as in claim 1. Stevens further discloses *a set of discrete program modules, each program module performing a specific task*. See Stevens, 334, and the discussion on daemons and process in **6.16 Internet Superserver**. By this rationale claim 6 is rejected.

42. In regard to claim 7, Stevens is applied as in claim 1. Stevens further discloses *an interaction-based model in which computer programs are defined by a series of interaction definitions*. See Stevens, 72-85 and the discussion **2.6 Daemon Processes**, which gives an example computer program defined by a *series of interaction definitions*, also known to one of ordinary skill in the art as having computer program code machine instructions or simply code. By this rationale claim 7 is rejected.

43. In regard to claim 8, Stevens is applied as in claim 1. Stevens further discloses *the execution models are embodied according to at least one of a command model, an action-view model, and a use case model*. Stevens dispatches programs to server processes, as shown in pages 334-341. These processes are *command models*. By this rationale claim 8 is rejected.

44. In regard to claim 9, Stevens is applied as in claim 1. Stevens further discloses *one of the execution models performs tasks according to a first business purpose, and the multi-layer application being reconfigurable to achieve a different business purpose by installing another execution model that performs tasks according to the second business purpose*. Stevens talks about using various *execution models* [programs, server processes] to achieve various *business purposes* such as ftp, telnet, login, and tftp. By initiating another server process, the server is *installing another execution model*. See Stevens, 335. By this rationale claim 9 is rejected.

45. In regard to claim 12, Stevens is applied as in claim 1. Stevens further discloses *the multi-layer application can be adapted to access new resources by substituting in a new interfacing layer that supports the new resources*. See Stevens, 261-267. By this rationale claim 12 is rejected.

46. In regard to claims 13-14, Stevens is applied as in claim 1. Stevens further discloses *the presentation layer being configured to select appropriate data formats for encoding the replies and the*

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presentation layer being configured to select appropriate communication protocols for delivering the replies to the clients. See Stevens, 250. By this rationale claims 13-14 are rejected.

47. In regard to claim 15, Stevens is applied as in claim 1. Stevens further discloses *the presentation layer is configured to determine how to display the replies for a particular client.* [Stevens, 250] By this rationale claim 15 is rejected.

48. In regard to claim 16, Stevens is applied as in claim 1. Stevens further discloses *the presentation tier is configured to determine at least one of (1) a layout of individual replies, (2) display attributes in which to present the replies, and (3) a presentation theme.* See Stevens, 250. By this rationale claim 16 is rejected.

49. In regard to claim 18, Stevens is applied as in claim 1. Stevens further discloses *an authentication module to authenticate the client devices or users of the client devices.* See Stevens, 430-436, where Kerberos authentication is disclosed. By this rationale claim 18 is rejected.

50. In regard to claims 19-21, Stevens is applied as in claim 1. In regard to claim 19, Stevens further discloses *a constraint system to constrain operation of the multi-layer application according to a hierarchy of different constraints.* In regard to claim 20, Stevens further discloses *a constraint system to constrain operation of the multi-layer application according to multiple different constraints, the constraint system comprising a hierarchy of constraint layers, with each constraint layer containing a set of one or more constraints that customize operation of the multi-layer application.* In regard to claim 21, Stevens further discloses *a constraint hierarchy of multiple constraint layers, each constraint layer containing a set of one or more constraints that constrain operation of the multi-layer application, the constraint layers being organized within the constraint hierarchy such that a first constraint layer limits a second constraint layer but the second constraint layer does not limit the first constraint layer; and a constraint resolver to resolve the constraint layers so that operation of the multi-layer application is constrained by a set of the constraints in the constraint layers.* Stevens discloses a configuration file for inetd and execution commands for each process called with multiple arguments for each process. See Stevens, 335-336. By this rationale claims 19-21 are rejected.

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51. In regard to claims 23-24, Stevens is applied as in claim 1. Stevens further discloses a security policy enforcement module to enforce security restrictions on accessing information stored at the one or more resources, wherein the security policy enforcement module is to enforce the security restrictions based on a set of low-level security rules defined using high-level permission concepts. Stevens discloses file access restrictions in pages 31-32. By this rationale claims 23-24 are rejected.

52. In regard to claims 48-51, the limitations of these claims are similar to the limitations in claims 1 and 13-22. Therefore the rejections applied to these claims are applicable to claims 48-51. By this rationale claims 48-51 are rejected.

Claim Rejections - 35 USC § 103

53. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

54. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens and Official Notice.

55. In regard to claim 17, Stevens is applied as in claim 1. Stevens discloses a *presentation module to determine how the replies will appear on the client devices to users*. See Stevens, 250. Stevens fails to disclose a rendering module, otherwise known in the art as a program to assist in displaying information. However, Official Notice is taken that displaying information on a screen has been well known in the art for decades. It would be obvious to one of ordinary skill in the art at the time of the invention to display the information from a computer request on a screen so a user could see the results of the computer request. By this rationale claim 17 is rejected.

56. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens.

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57. In regard to claim 22, Stevens is applied as in claim 21. Stevens fails to disclose the use of specific types of constraints [parameters, arguments] as defined in claim 22. However, Stevens has shown the use of constraints [parameters, arguments] in defining the use and limits of a program as applied in claim 21. It would be obvious to one of ordinary skill in the art to apply a plethora of types of constraints to the Stevens description to allow for specialized operation according to the user and system specific needs, including *legally mandated constraints*, *company-mandated constraints*, *customer constraints*, *cultural constraints*, and *end user constraints*. By this rationale claim 22 is rejected.

58. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens and Gilly (Unix in a Nutshell, O'Reilly and Associates, 1992).

59. Regarding claims 10-11, Stevens is applied as in claim 1. Stevens fails to disclose data conversion. However, Gilly discloses methods of converting data in the UNIX system. See Gilly, 10-1 – 11-11. It would be obvious to one of ordinary skill in the art to convert data in order to allow various server processes to accept the requests as specifically required by the preexisting server processes. By this rationale claims 10-11 are rejected.

60. Claims 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens and Peek (Unix Power Tools).

61. Regarding claims 25-28, Stevens is applied as in claim 1. Stevens fails to disclose a method for handling data forms. However, Peek discloses a UNIX tool that allows for handling a data form and receiving the information from that form. Peek, 875-879. It would be obvious to one of ordinary skill in the art to use the form capabilities of Peek with the teachings of Stevens to allow a user to input data easily. By this rationale claims 25-28 are rejected.

62. Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens and Tuthill (Creating Worldwide Software).

63. In regard to claims 29-30, Stevens is applied as in claim 1. Stevens fails to disclose internationalization of software [using *locale-specific content for a particular locale*]. However, Tuthill discloses an entire volume of ways to modify a program for international usage. To allow brevity of the legal record, the Examiner is only including the first chapter of this 382 page book. It would be obvious to

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one of ordinary skill in the art to combine the teachings of Tuthill with the teachings of Stevens to allow any program to have a worldwide audience. By this rationale claims 29-30 are rejected.

Double Patenting

64. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

65. Claims 1, 17, and 48-50 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2 and 7-8 of copending Application No. 09/845,752. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of the claims are substantially similar.

66. Claim 1 is listed in italics. **The relevant claim language of 09/847,067 is in bold.**

67. *A server system comprising: one or more computers; **(one or more computers)** a multi-layer application executing on the computers to handle client requests submitted by various client devices (an application executing on the computers to handle client requests), the multi-layer application comprising: a problem-solving logic layer to process the client requests according to an associated problem domain, wherein the problem domain pertains to a particular category of service, the problem-solving logic layer containing one or more execution models to perform various sets of tasks when processing the client requests, the problem-solving logic layer producing replies to the client requests; (a*

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business logic layer to process the client requests according to a particular business domain and produce replies to be returned to the clients in response to the client requests); an execution environment layer to receive the client requests and select an appropriate execution model in the problem-solving logic layer for processing the client requests; (process the client requests according to a particular business domain); an interfacing layer to interface the problem-solving logic layer with one or more resources so that the execution models may utilize the resources when processing the client requests (the request dispatcher being configured to access the tag library...); and a presentation layer to receive the replies produced by the problem-solving logic layer and to structure the replies in a manner that makes the replies presentable on the various client devices (a presentation layer separate from, but in communication with, the business logic layer to structure the replies in a manner that makes the replies presentable on different types of client devices...), wherein any of the layers may be changed without impacting other layers. (claim 2, wherein the application is reconfigurable to other business domains by substituting other business logic layers that are designed to process the client requests according to the other business domains)

68. In regard to claim 17, *a presentation module to determine how the replies will appear on the client devices to users; (claim 8 - a presentation tier to determine how the replies will appear on the client devices to users) and a rendering module, separate from the presentation module, to determine how to render the replies on the client devices. (claim 8 - a rendering tier, separate from the presentation tier, to determine how to render the replies on the client devices)*

69. Claim 48 of the instant application is listed in italics. **The relevant claim language of 09/847,067 is in bold.**

70. *A method for processing client requests in a system, comprising: receiving requests from multiple clients (one or more computers; and an application executing on the computers to handle client requests), wherein the business-related problem domain pertains to a particular category of business-related service; processing the requests within problem-solving logic to produce replies within the business-related problem domain, (a business logic layer to process the client requests according to a particular business domain and produce replies to be returned to the clients in response to the*

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client requests) the processing comprising requesting data to be used in formulating the replies; retrieving the data from one or more external resources and mapping the data to a domain framework for the business-related problem domain, the domain framework being independent from the problem-solving logic; (a presentation layer separate from, but in communication with, the business logic layer to structure the replies in a manner that makes the replies presentable on different types of client devices (mapping the data to a domain framework) according to a tag library (external resource) containing pre-constructed tags for a variety of data formats and interfacing the problem-solving logic to the domain framework to obtain the data for use in processing the request, (a request dispatcher to structure a reply for service back to a client device, the request dispatcher being configured to access the tag library to obtain tags to structure the reply according to a particular data format) wherein a new business-related problem domain can be exchanged for a previous business-related problem domain by replacing one or more components of the system, without having to reconstruct an entire application solution for the new business-related problem domain. (claim 2, wherein the application is reconfigurable to other business domains by substituting other business logic layers that are designed to process the client requests according to the other business domains)

71. In regard to claim 49 of the instant application, *structuring the replies for presentation to the clients. (claim 1, a request dispatcher to structure a reply for service back to a client device)*

72. In regard to claim 50 of the instant application, *structuring the replies to define how the replies will appear when presented at the clients; and independent of said structuring, conforming the replies to output capabilities of the clients. (claim 7, the presentation layer is configured to determine how to display the replies for a particular client)*

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

73. Claims 23 and 24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 0/847,037 in view of

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09/845,752. The addition of security features to a networking application is a logical and obvious step to one of ordinary skill in the art.

74. The analysis for claim 1 is shown above. Claim 23 of the instant application is shown in italics.

The conflicting claims are shown in bold.

75. In regard to claim 23, *a security policy enforcement module to enforce security restrictions on accessing information stored at the one or more resources. (claim 1 or 6 – a pluggable security policy enforcement module...)*

76. In regard to claim 24, *the security policy enforcement module is to enforce the security restrictions based on a set of low-level security rules defined using high-level permission concepts (claim 6 – the different granularities of control comprise a plurality of sets of rules, and wherein each set of rules includes a plurality of permission assignment objects...)*

This is a provisional obviousness-type double patenting rejection.

77. Claim 25 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/845,752 in view of 09/847,037 and 09/847,038 and 09/845,751.

78. The analysis for claim 1 is shown above. Claims of the instant application are shown in italics.

The conflicting claims are shown in bold.

79. In regard to claim 25, *the presentation layer includes a form processor to generate a data input form for the multi-layer application by automatically adding, to a form definition that defines the data input form, validation code to validate subsequent inputs to one or more fields of the data input form.*

(09/847,037 claim 1 – accessing a computer program; automatically identifying a set of one or more attributes of the computer program with values that are to be input to the computer program by a user; and creating one or more forms including selected ones of the set of one or more attributes. 09/847,037 claim 2 – further comprising generating a list including the set of one or more attributes and outputting the list. 09/847,037 claim 3 – identifying the selected one or more attributes to include on the form; creating a data input field for the form definition via which a user

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can subsequently input a value for the attribute; and creating a submit tag for the form definition via which the user can subsequently input a request to submit the values on the form to the computer program. 09/847,038 claim 1 – receiving an indication of a desired form to be used for data input; automatically identifying one or more data input fields to be included on the form; and generating a form definition including the automatically identified one or more data input fields. 09/845,751 claim 1 – identifying a custom field on a source code form definition and one or more restrictions on an input to the custom field; identifying validation code that, when executed, validates that the input conforms to the one or more restrictions; and adding, to a new form definition that includes a non-custom field corresponding to the custom field, the identified validation code.).

This is a provisional obviousness-type double patenting rejection.

80. Claims 20-22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 09/845,780 in view of 09/845,752.

81. The analysis for claim 1 is shown above. Claims of the instant application are shown in italics. The conflicting claims are shown in bold.

82. In regard to claim 20, *a constraint system to constrain operation of the multi-layer application according to multiple different constraints, the constraint system comprising a hierarchy of constraint layers, with each constraint layer containing a set of one or more constraints that customize operation of the multi-layer application. (claim 1 – an application executing on the computers to receive and process client requests; and a constraint system to constrain operation of the application according to multiple different constraints, the constraint system comprising a hierarchy of constraint layers, with each constraint layer containing a set of one or more constraints that customize operation of the application).*

83. In regard to claim 21, *a constraint hierarchy of multiple constraint layers, each constraint layer containing a set of one or more constraints that constrain operation of the multi-layer application, the*

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constraint layers being organized within the constraint hierarchy such that a first constraint layer limits a second constraint layer but the second constraint layer does not limit the first constraint layer (claim 7 – the constraint layers are organized within the hierarchy such that a first constraint layer limits a second constraint layer but the second constraint layer does not limit the first constraint layer); and a constraint resolver to resolve the constraint layers so that operation of the multi-layer application is constrained by a set of the constraints in the constraint layers. (claim 8 – a constraint resolver to resolve the constraint layers so that operation of the application is constrained by a sum of the constraints in the layers).

84. In regard to claim 22, *the hierarchy of constraints comprises constraints selected from a group of constraints comprising: legally mandated constraints to constrain operation of the multi-layer application according to legal principles; (claim 2 – the hierarchy comprises a constraint layer that contains legally mandated constraints to constrain operation of the application according to legal principles); company-mandated constraints to constrain operation of the multi-layer application according to preferences of a company that operates the application; (claim 3 – a constraint layer that contains company-mandated constraints to constrain operation of the application according to preferences of a company that operates the application) customer constraints to constrain operation of the multi-layer application according to preferences of customers; (claim 4 – a constraint layer that contains customer constraints to constrain operation of the application according to preferences of customers) cultural constraints to constrain operation of the multi-layer application according to cultural aspects; (claim 5 – a constraint layer that contains cultural constraints to constrain operation of the application according to cultural aspects) and end user constraints to constrain operation of the multi-layer application according to preferences of an end user. (claim 6 – a constraint layer that contains end user constraints to constrain operation of the application according to preferences of an end user.)*

85. This is a provisional obviousness-type double patenting rejection.

Requirement for Information

86. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

87. Applicant is required to provide any and all available documentation concerning the development and deployment of GEtheSource (or any previous names for the aforementioned product) as mentioned in page 41 of Applicant's remarks. Applicant is required to provide a timeline clearly stating the dates of deployment of GEtheSource (or any previous names for the aforementioned product) to provide the statutory bar for the invention.

88. Applicant's good faith reply to the prior requirement for information is appreciated.

Conclusion

89. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


90. Gilly, Daniel. UNIX in a Nutshell. Additional pages to the previous citation illustrating the concepts of displaying material on a screen to comply with Applicant's traversal of Official Notice. Please note scrolling, displaying on a screen, echo, print to screen, etc. references in the cited pages.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. Swearingen whose telephone number is (571) 272-3921. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571-272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

~~Jason Gardone~~ 
Supervisory Patent Examiner
Art Unit 2145


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER